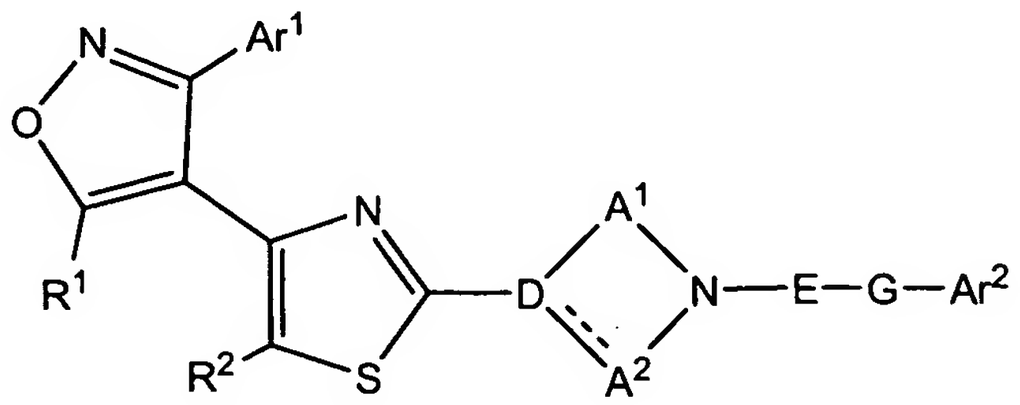
In the Claims

Please amend the claims according to the claim listing provided below.

Marked-Up Copy of Claims:

1. (Original) A compound of Formula I:



I

or a pharmaceutically acceptable salt, hydrate or solvate thereof, wherein:

Ar^1 is aryl, heteroaryl, biaryl, biheteroaryl, arylheteroaryl or heteroarylaryl, wherein Ar^1 is optionally substituted with one or more substituents selected from halo, cyano, nitro, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, carbocyclyl optionally substituted by one or more R^{13}, heterocyclyl optionally substituted by one or more R^{13}, carbocyclylalkyl optionally substituted by one or more R^{13}, carbocyclylalkenyl optionally substituted by one or more R^{13}, carbocyclylalkynyl optionally substituted by one or more R^{13}, heterocyclylalkyl optionally substituted by one or more R^{13}, heterocyclylalkenyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, hydroxylamino, OR^5, SR^5, SOR^6, SO_2R^6, COR^6, $COOR^5$, $OC(O)R^6$ or NR^7R^8;

Ar^2 is aryl or heteroaryl, each optionally substituted with one or more substituents selected from halo, cyano, nitro, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, carbocyclyl optionally substituted by one or more R^{14}, heterocyclyl optionally substituted by one or more R^{14}, hydroxylamino, OR^9, SR^9, SOR^{10}, SO_2R^{10}, COR^{10}, $COOR^9$, $OC(O)R^{10}$ or $NR^{11}R^{12}$;

D is N, C or CR^3;

<u>- - -</u> is a single bond when D is N or CR^3;

<u>- - -</u> is a double bond when D is C;

A^1 is absent or a C_{1-3} straight-chain aliphatic group optionally substituted with one or more substituents selected from halo, C_{1-4} alkyl, C_{1-4} haloalkyl, C_{1-4} alkoxy, C_{1-4} haloalkoxy, amino, (C_{1-6} alkyl)amino, di(C_{1-6} alkyl)amino, hydroxy, carboxy, (C_{1-4} alkoxy)carbonyl, or cyano;

A^2 is C_{1-4} straight-chain aliphatic group optionally substituted with one or more substituents selected from halo, C_{1-4} alkyl, C_{1-4} haloalkyl, C_{1-4} alkoxy, C_{1-4} haloalkoxy, amino, (C_{1-6} alkyl)amino, di(C_{1-6} alkyl)amino, hydroxy, carboxy, (C_{1-4} alkoxy)carbonyl, or cyano;

E is CO, C(O)O, $C(O)NR^4$, NR^4CONR^4, SO, SO_2, $SONR^4$, SO_2NR^4, or a bond;

G is C_{1-3} alkylene, C_{2-3} alkenylene or C_{2-3} alkynylene optionally substituted with one or more substituents selected from halo, C_{1-4} alkyl, C_{1-4} haloalkyl, C_{1-4} alkoxy, C_{1-4} haloalkoxy, amino, (C_{1-4} alkyl)amino, di(C_{1-4} alkyl)amino, hydroxy, carboxy, (C_{1-4} alkoxy)carbonyl, or cyano;

R^1 is H, C_{1-6} alkyl, C_{2-6} alkenyl or C_{2-6} alkynyl, wherein R^1 is optionally substituted with one or more substituents selected from halo, OH, SH, nitro, cyano, C_{1-4} haloalkyl, C_{1-5} acyl, C_{1-5} acyloxy, C_{1-4} alkoxy, C_{1-4} thioalkoxy, C_{1-4} haloalkoxy, amino, (C_{1-4} alkyl)amino, di(C_{1-4} alkyl)amino, aminocarbonyl, (C_{1-4} alkyl)aminocarbonyl, di(C_{1-4} alkyl)aminocarbonyl, C_{1-4} alkylsulfinyl, C_{1-4} alkylsulfonyl, C_{1-4} haloalkylsulfinyl, C_{1-4} haloalkylsulfonyl, aminosulfonyl, (C_{1-4} alkyl)aminosulfonyl, di(C_{1-4} alkyl)aminosulfonyl, ureido, C_{1-4} alkylureido, di(C_{1-4} alkyl)ureido, thioureido, C_{1-4} alkylthioureido, di(C_{1-4} alkyl)thioureido, carboxy, (C_{1-6} alkoxy)carbonyl, and hydroxylamino;

R^2 is H, C_{1-6} alkyl, C_{2-6} alkenyl or C_{2-6} alkynyl, wherein R^2 is optionally substituted with one or more substituents selected from halo, OH, SH, nitro, cyano, C_{1-4} haloalkyl, C_{1-5} acyl, C_{1-5} acyloxy, C_{1-4} alkoxy, C_{1-4} thioalkoxy, C_{1-4} haloalkoxy, amino, (C_{1-4} alkyl)amino, di(C_{1-4} alkyl)amino, aminocarbonyl, (C_{1-4} alkyl)aminocarbonyl, di(C_{1-4} alkyl)aminocarbonyl, C_{1-4} alkylsulfinyl, C_{1-4} alkylsulfonyl, C_{1-4} haloalkylsulfinyl, C_{1-4} haloalkylsulfonyl, aminosulfonyl, (C_{1-4} alkyl)aminosulfonyl, di(C_{1-4} alkyl)aminosulfonyl, ureido, C_{1-4} alkylureido, di(C_{1-4} alkyl)ureido, thioureido, C_{1-4} alkylthioureido, di(C_{1-4} alkyl)thioureido, carboxy, (C_{1-6} alkoxy)carbonyl, and hydroxylamino;

or R^1 and R^2 together with the carbon atoms to which they are attached and the two carbon atoms through which the isoxazole and thiazole moieties of the core are joined form a fused C_{5-7} carbocyclyl group or fused 5-7 membered heterocyclyl group optionally substituted with one or more substituents selected from halo, C_{1-4} alkyl, C_{1-4} haloalkyl, C_{1-4} alkoxy, C_{1-4} haloalkoxy, amino, (C_{1-4} alkyl)amino, di(C_{1-4} alkyl)amino, hydroxy, carboxy, (C_{1-4} alkoxy)carbonyl, or cyano;

R^3 is H or C_{1-6} alkyl;

R^4, at each independent occurrence, is H or C_{1-4} alkyl;

R^5 and R^9 are each, independently, H, C_{1-8} alkyl, C_{1-8} haloalkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, aryl, heteroaryl, C_{3-7} cycloalkyl, 5-7 membered heterocycloalkyl, arylalkyl, heteroarylalkyl, (C_{3-7} cycloalkyl)alkyl or (5-7 membered heterocycloalkyl)alkyl;

R^6 and R^{10} are each, independently, H, C_{1-8} alkyl, C_{1-8} haloalkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, aryl, heteroaryl, C_{3-7} cycloalkyl, 5-7 membered heterocycloalkyl, arylalkyl, heteroarylalkyl, (C_{3-7} cycloalkyl)alkyl, (5-7 membered heterocycloalkyl)alkyl, amino, (C_{1-4} alkyl)amino, di(C_{1-4} alkyl)amino,

R^7 and R^8 are each, independently, H, C_{1-8} alkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, aryl, heteroaryl, C_{3-7} cycloalkyl, 5-7 membered heterocycloalkyl, arylalkyl, heteroarylalkyl, (C_{3-7} cycloalkyl)alkyl, (5-7 membered heterocycloalkyl)alkyl, (C_{1-8} alkyl)carbonyl, (C_{1-8} haloalkyl)carbonyl, (C_{1-8} alkoxy)carbonyl, (C_{1-8} haloalkoxy)carbonyl, (C_{1-4} alkyl)sulfonyl, (C_{1-4} haloalkyl)sulfonyl or arylsulfonyl;

or R^7 and R^8, together with the N atom to which they are attached form a 5-7 membered heterocycloalkyl group;

R^{11} and R^{12} are each, independently, H, C_{1-8} alkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, aryl, heteroaryl, C_{3-7} cycloalkyl, 5-7 membered heterocycloalkyl, arylalkyl, heteroarylalkyl, (C_{3-7} cycloalkyl)alkyl, (5-7 membered heterocycloalkyl)alkyl, (C_{1-8} alkyl)carbonyl, (C_{1-8} haloalkyl)carbonyl, (C_{1-8} alkoxy)carbonyl, (C_{1-8} haloalkoxy)carbonyl, (C_{1-4} alkyl)sulfonyl, (C_{1-4} haloalkyl)sulfonyl or arylsulfonyl;

or R^{11} and R^{12}, together with the N atom to which they are attached form a 5-7 membered heterocycloalkyl group; and

R^{13} and R^{14} are each, independently, halo, cyano, nitro, C_{1-4} alkyl, C_{1-4} haloalkyl, C_{1-4} alkoxy, C_{1-4} haloalkoxy, amino, (C_{1-4} alkyl)amino, di(C_{1-4} alkyl)amino, hydroxy, carboxy, (C_{1-4} alkoxy)carbonyl, C_{1-4} acyl, C_{1-4} acyloxy, aminocarbonyl, (C_{1-4} alkyl)aminocarbonyl, or di(C_{1-4} alkyl)aminocarbonyl.

2. (Original) The compound of claim 1 wherein Ar^1 is aryl, heteroaryl, biaryl, biheteroaryl, arylheteroaryl or heteroarylaryl, wherein Ar^1 is substituted with 1, 2 or 3 substituents selected from halo, cyano, nitro, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, carbocyclyl optionally substituted by one or more R^{13}, heterocyclyl optionally substituted by one or more R^{13}, carbocyclylalkyl optionally substituted by one or more R^{13}, carbocyclylalkenyl optionally substituted by one or more R^{13}, carbocyclylalkynyl optionally substituted by one or more R^{13}, heterocyclylalkyl optionally substituted by one or more R^{13}, heterocyclylalkenyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, hydroxylamino, OR^5, SR^5, SOR^6, SO_2R^6, COR^6, $COOR^5$, $OC(O)R^6$ or NR^7R^8.

3. (Original) The compound of claim 1 wherein Ar^1 is aryl, heteroaryl, biaryl, biheteroaryl, arylheteroaryl or heteroarylaryl, wherein Ar^1 is optionally substituted with one or more substituents selected from halo, cyano, nitro, heterocyclyl optionally substituted by one or more R^{13}, heterocyclylalkyl optionally substituted by one or more R^{13}, heterocyclylalkenyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, hydroxylamino, OR^5, SR^5, SOR^6, SO_2R^6, COR^6, $COOR^5$, $OC(O)R^6$ or NR^7R^8.

4. (Original) The compound of claim 1 wherein Ar^1 is aryl, biaryl or heteroarylaryl, wherein Ar^1 is optionally substituted with one or more substituents selected from halo, cyano, nitro, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, carbocyclyl optionally substituted by one or more R^{13}, heterocyclyl optionally substituted by one or more R^{13}, carbocyclylalkyl optionally substituted by one or more R^{13}, carbocyclylalkenyl optionally substituted by one or more R^{13}, carbocyclylalkynyl optionally substituted by one or more R^{13}, heterocyclylalkyl optionally substituted by one or more R^{13}, heterocyclylalkenyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, hydroxylamino, OR^5, SR^5, SOR^6, SO_2R^6, COR^6, $COOR^5$, $OC(O)R^6$ or NR^7R^8.

5. (Original) The compound of claim 1 wherein Ar^1 is phenyl, biphenyl or heteroarylphenyl, wherein Ar^1 is optionally substituted with one or more substituents selected from halo, cyano, nitro, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, carbocyclyl optionally substituted by one or more R^{13}, heterocyclyl optionally substituted by one or more R^{13}, carbocyclylalkyl optionally substituted by one or more R^{13}, carbocyclylalkenyl optionally substituted by one or more R^{13}, carbocyclylalkynyl optionally substituted by one or more R^{13}, heterocyclylalkyl optionally substituted by one or more R^{13}, heterocyclylalkenyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, hydroxylamino, OR^5, SR^5, SOR^6, SO_2R^6, COR^6, $COOR^5$, $OC(O)R^6$ or NR^7R^8.

6. (Original) The compound of claim 1 wherein Ar^1 is phenyl, biphenyl or heteroarylphenyl, wherein Ar^1 is optionally substituted with 1, 2 or 3 substituents selected from halo, cyano, nitro, heterocyclyl optionally substituted by one or more R^{13}, heterocyclylalkyl optionally substituted by one or more R^{13}, heterocyclylalkenyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, hydroxylamino, OR^5, SR^5, SOR^6, SO_2R^6, COR^6, $COOR^5$, $OC(O)R^6$ or NR^7R^8.

7. (Original) The compound of claim 1 wherein Ar^1 is phenyl, biphenyl or heteroarylphenyl, wherein Ar^1 is substituted with 1, 2 or 3 substituents selected from halo, cyano, nitro, heterocyclyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, C_{1-4} alkoxy, SO_2R^6, COR^6, $COOR^5$ or NR^7R^8.

8. (Original) The compound of claim 1 wherein Ar^2 is aryl or heteroaryl, each optionally substituted with 1, 2 or 3 substituents selected from halo, cyano, nitro, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, carbocyclyl optionally substituted by one or more R^{14}, heterocyclyl optionally substituted by one or more R^{14}, hydroxylamino, OR^9, SR^9, SOR^{10}, SO_2R^{10}, COR^{10}, $COOR^9$, $OC(O)R^{10}$ or $NR^{11}R^{12}$.

9. (Original) The compound of claim 1 wherein Ar^2 is aryl or heteroaryl.

10. (Original) The compound of claim 1 wherein Ar^2 is heteroaryl.

11. (Original) The compound of claim 1 wherein Ar^2 is thienyl.

12. (Original) The compound of claim 1 wherein Ar^2 is aryl.

13. (Original) The compound of claim 1 wherein Ar^2 is phenyl.

14. (Original) The compound of claim 1 wherein D is CR^3.

15. (Original) The compound of claim 1 wherein D is CH.

16. (Original) The compound of claim 1 wherein A^1 is a C_{1-3} alkylene group.

17. (Original) The compound of claim 1 wherein A^1 is CH_2 or CH_2CH_2.

18. (Original) The compound of claim 1 wherein A^1 is absent.

19. (Original) The compound of claim 1 wherein D is CR^3 and A^2 is a C_{1-3} alkylene group.

20. (Original) The compound of claim 1 wherein D is CR^3 and A^2 is CH_2CH_2 or $CH_2CH_2CH_2$.

21. (Original) The compound of claim 1 wherein D is CR^3, A^1 is CH_2CH_2, and A^2 is CH_2CH_2.

22. (Original) The compound of claim 1 wherein D is CR^3, A^1 is absent, and A^2 is $CH_2CH_2CH_2$.

23. (Original) The compound of claim 1 wherein E is CO, C(O)O, $C(O)NR^4$, SO_2 or a bond.

24. (Original) The compound of claim 1 wherein E is CO or SO_2.

25. (Original) The compound of claim 1 wherein E is CO.

26. (Original) The compound of claim 1 wherein G is C_{1-3} alkylene.

27. (Original) The compound of claim 1 wherein G is CH_2 or CH_2CH_2.

28. (Original) The compound of claim 1 wherein G is CH_2.

29. (Original) The compound of claim 1 wherein R^1 is H or C_{1-4} alkyl.

30. (Original) The compound of claim 1 wherein R^1 is methyl.

31. (Original) The compound of claim 1 wherein:

R^1 is H, C_{1-6} alkyl, C_{2-6} alkenyl or C_{2-6} alkynyl, wherein R^1 is optionally substituted with one or more substituents selected from halo, OH, SH, nitro, cyano, C_{1-4} haloalkyl, C_{1-5} acyl, C_{1-5} acyloxy, C_{1-4} alkoxy, C_{1-4} thioalkoxy, C_{1-4} haloalkoxy, amino, (C_{1-4} alkyl)amino, di(C_{1-4} alkyl)amino, aminocarbonyl, (C_{1-4} alkyl)aminocarbonyl, di(C_{1-4} alkyl)aminocarbonyl, C_{1-4} alkylsulfinyl, C_{1-4} alkylsulfonyl, C_{1-4} haloalkylsulfinyl, C_{1-4} haloalkylsulfonyl, aminosulfonyl, (C_{1-4} alkyl)aminosulfonyl, di(C_{1-4} alkyl)aminosulfonyl, ureido, C_{1-4} alkylureido, di(C_{1-4} alkyl)ureido, thioureido, C_{1-4} alkylthioureido, di(C_{1-4} alkyl)thioureido, carboxy, (C_{1-6} alkoxy)carbonyl, and hydroxylamino; and

R^2 is H, C_{1-6} alkyl, C_{2-6} alkenyl or C_{2-6} alkynyl, wherein R^2 is optionally substituted with one or more substituents selected from halo, OH, SH, nitro, cyano, C_{1-4} haloalkyl, C_{1-5} acyl, C_{1-5} acyloxy, C_{1-4} alkoxy, C_{1-4} thioalkoxy, C_{1-4} haloalkoxy, amino, (C_{1-4} alkyl)amino, di(C_{1-4} alkyl)amino, aminocarbonyl, (C_{1-4} alkyl)aminocarbonyl, di(C_{1-4} alkyl)aminocarbonyl, C_{1-4} alkylsulfinyl, C_{1-4}

alkylsulfonyl, C_{1-4} haloalkylsulfinyl, C_{1-4} haloalkylsulfonyl, aminosulfonyl, (C_{1-4} alkyl)aminosulfonyl, di(C_{1-4} alkyl)aminosulfonyl, ureido, C_{1-4} alkylureido, di(C_{1-4} alkyl)ureido, thioureido, C_{1-4} alkylthioureido, di(C_{1-4} alkyl)thioureido, carboxy, (C_{1-6} alkoxy)carbonyl, and hydroxylamino.

32. (Original) The compound of claim 1 wherein R^2 is H or C_{1-4} alkyl.

33. (Original) The compound of claim 1 wherein R^2 is H.

34. (Original) The compound of claim 1 wherein R^3 is H.

35. (Original) The compound of claim 1 wherein R^4, at each independent occurrence, is H.

36. (Original) The compound of claim 1 wherein:

D is CR^3;

A^1 is a absent or a C_{1-3} alkylene group;

A^2 is a C_{1-3} alkylene group;

E is CO, C(O)O, $C(O)NR^4$, SO_2 or a bond;

G is C_{1-3} alkylene;

R^1 is H or C_{1-6} alkyl; and

R^2 is H or C_{1-6} alkyl.

37. (Original) The compound of claim 1 wherein:

Ar^2 is aryl or heteroaryl, each optionally substituted with 1, 2 or 3 substituents selected from halo, cyano, nitro, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, carbocyclyl optionally substituted by one or more R^{14}, heterocyclyl optionally substituted by one or more R^{14}, hydroxylamino, OR^9, SR^9, SOR^{10}, SO_2R^{10}, COR^{10}, $COOR^9$, $OC(O)R^{10}$ or $NR^{11}R^{12}$;

D is CR^3;

A^1 is absent or a C_{1-3} alkylene group;

A^2 is a C_{1-3} alkylene group;

E is CO, C(O)O, $C(O)NR^4$, SO_2 or a bond;

G is C_{1-3} alkylene;

R^1 is H or C_{1-6} alkyl; and

R^2 is H or C_{1-6} alkyl.

38. (Original) The compound of claim 1 wherein:

Ar^1 is phenyl, biphenyl or heteroarylphenyl, wherein Ar^1 is optionally substituted with one or more substituents selected from halo, cyano, nitro, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, carbocyclyl optionally substituted by one or more R^{13}, heterocyclyl optionally substituted by one or more R^{13}, carbocyclylalkyl optionally substituted by one or more R^{13}, carbocyclylalkenyl optionally substituted by one or more R^{13}, carbocyclylalkynyl optionally substituted by one or more R^{13}, heterocyclylalkyl optionally substituted by one or more R^{13}, heterocyclylalkenyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, hydroxylamino, OR^5, SR^5, SOR^6, SO_2R^6, COR^6, $COOR^5$, $OC(O)R^6$ or NR^7R^8;

Ar^2 is aryl or heteroaryl;

D is CR^3;

A^1 is absent or a C_{1-3} alkylene group;

A^2 is a C_{1-3} alkylene group;

E is CO, C(O)O, $C(O)NR^4$, SO_2 or a bond;

G is C_{1-3} alkylene;

R^1 is H or C_{1-6} alkyl; and

R^2 is H or C_{1-6} alkyl.

39. (Original) The compound of claim 1 wherein:

Ar^1 is phenyl, biphenyl or heteroarylphenyl, wherein Ar^1 is optionally substituted with 1, 2 or 3 substituents selected from halo, cyano, nitro, heterocyclyl optionally substituted by one or more R^{13}, heterocyclylalkyl optionally substituted by one or more R^{13}, heterocyclylalkenyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, hydroxylamino, OR^5, SR^5, SOR^6, SO_2R^6, COR^6, $COOR^5$, $OC(O)R^6$ or NR^7R^8;

Ar^2 is aryl or heteroaryl;

D is CR^3;

A^1 is absent or a C_{1-3} alkylene group;

A^2 is a C_{1-3} alkylene group;

E is CO, C(O)O, $C(O)NR^4$, SO_2 or a bond;

G is C_{1-3} alkylene;

R^1 is H or C_{1-6} alkyl; and

R^2 is H or C_{1-6} alkyl.

40. (Original) The compound of claim 1 wherein:

Ar^1 is phenyl, biphenyl or heteroarylphenyl, wherein Ar^1 is optionally substituted with 1, 2 or 3 substituents selected from halo, cyano, nitro, heterocyclyl optionally substituted by one or more R^{13}, heterocyclylalkyl optionally substituted by one or more R^{13}, heterocyclylalkenyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, hydroxylamino, OR^5, SR^5, SOR^6, SO_2R^6, COR^6, $COOR^5$, $OC(O)R^6$ or NR^7R^8;

Ar^2 is aryl or heteroaryl;

D is CH;

A^1 is absent, CH_2 or CH_2CH_2;

A^2 is CH_2CH_2 or $CH_2CH_2CH_2$;

E is CO, SO_2 or a bond;

G is CH_2 or CH_2CH_2;

R^1 is C_{1-4} alkyl; and

R^2 is H.

41. (Original) The compound of claim 1 wherein:

Ar^1 is phenyl, biphenyl or heteroarylphenyl, wherein Ar^1 is substituted with 1, 2 or 3 substituents selected from halo, cyano, nitro, heterocyclyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, C_{1-4} alkoxy, SO_2R^6, COR^6, $COOR^5$ or NR^7R^8;

Ar^2 is aryl or heteroaryl;

D is CH;

A^1 is absent, CH_2 or CH_2CH_2;

A^2 is CH_2CH_2 or $CH_2CH_2CH_2$;

E is CO, SO_2 or a bond;

G is CH_2 or CH_2CH_2;

R^1 is C_{1-4} alkyl; and

R^2 is H.

42. (Original) The compound of claim 1 selected from:

4-{4-[3-(3-Bromo-phenyl)-5-methyl-isoxazol-4-yl]-thiazol-2-yl}-1-phenylmethane-sulfonyl-piperidine;

1-(4-{4-[3-(3-Bromo-phenyl)-5-methyl-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-2-yl-ethanone;

1-(4-{4-[3-(3-Bromo-phenyl)-5-methyl-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-3-yl-ethanone;

1-(2-{4-[3-(3-Bromo-phenyl)-5-methyl-isoxazol-4-yl]-thiazol-2-yl}-pyrrolidin-1-yl)-2-thiophen-2-yl-ethanone;

1-(4-{4-[3-(3-Isopropylamino-phenyl)-5-methyl-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-2-yl-ethanone;

1-[4-(4-{5-Methyl-3-[3-(2-morpholin-4-yl-ethylamino)-phenyl]-isoxazol-4-yl}-thiazol-2-yl)-piperidin-1-yl]-2-thiophen-2-yl-ethanone;

1-(4-{4-[5-Methyl-3-(3-morpholin-4-yl-phenyl)-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-2-yl-ethanone;

1-[4-(4-{5-Methyl-3-[3-(4-methyl-piperazin-1-yl)-phenyl]-isoxazol-4-yl}-thiazol-2-yl)-piperidin-1-yl]-2-thiophen-2-yl-ethanone;

N-[3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-4-yl]-acetamide;

N-[3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-3-yl]-acetamide;

3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-4-carboxylic acid amide;

3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-3-carboxylic acid amide;

3'-{5-Methyl-4-[2-(1-phenylmethanesulfonyl-piperidin-4-yl)-thiazol-4-yl]-isoxazol-3-yl}-biphenyl-4-carboxylic acid;

3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-4-carboxylic acid;

3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-pyrrolidin-2-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-4-carboxylic acid;

3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-3-carboxylic acid;

1-(4-{4-[5-Methyl-3-(3-pyridin-4-yl-phenyl)-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-2-yl-ethanone;

1-(4-{4-[5-Methyl-3-(3-pyrimidin-5-yl-phenyl)-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-2-yl-ethanone;

1-(4-{4-[3-(4'-Methoxy-biphenyl-3-yl)-5-methyl-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-2-yl-ethanone;

3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-4-carboxylic acid dimethylamide;

3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-4-carboxylic acid methylamide;

1-[4-(4-{5-Methyl-3-[4'-(morpholine-4-carbonyl)-biphenyl-3-yl]-isoxazol-4-yl}-thiazol-2-yl)-piperidin-1-yl]-2-thiophen-2-yl-ethanone;

1-[4-(4-{5-Methyl-3-[3'-(morpholine-4-carbonyl)-biphenyl-3-yl]-isoxazol-4-yl}-thiazol-2-yl)-piperidin-1-yl]-2-thiophen-2-yl-ethanone;

1-(4-{4-[3-(4'-Amino-biphenyl-3-yl)-5-methyl-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-2-yl-ethanone;

N-[3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-4-yl]-methanesulfonamide;

1-(4-{4-[3-(4'-Methanesulfonyl-biphenyl-3-yl)-5-methyl-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-2-yl-ethanone;

2,2,2-Trifluoro-N-[3'-(5-methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-3-yl]-acetamide;

1-(4-{4-[3-(3'-Methanesulfonyl-biphenyl-3-yl)-5-methyl-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-2-yl-ethanone;

3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-4-carbonitrile;

1-{4-[4-(3-{3-[3-(1,1-Dioxo-1λ6-thiomorpholin-4-yl)-prop-1-ynyl]-phenyl}-5-methyl-isoxazol-4-yl)-thiazol-2-yl]-piperidin-1-yl}-2-thiophen-2-yl-ethanone;

1-[4-(4-{5-Methyl-3-[4'-(1H-tetrazol-5-yl)-biphenyl-3-yl]-isoxazol-4-yl}-thiazol-2-yl)-piperidin-1-yl]-2-thiophen-2-yl-ethanone; and

1-[4-(4-{3-[4'-(4,5-Dihydro-1H-imidazol-2-yl)-biphenyl-3-yl]-5-methyl-isoxazol-4-yl}-thiazol-2-yl)-piperidin-1-yl]-2-thiophen-2-yl-ethanone;

or pharmaceutically acceptable salt thereof.

43. (Original) A composition comprising a compound of claim 1 and a pharmaceutically acceptable carrier.

44. (Original) A method of modulating the follicle stimulating hormone (FSH) receptor comprising contacting said receptor with a compound of claim 1.

45. (Amended) A method of activating the follicle stimulating hormone (FSH) receptor comprising contacting said receptor with a compound of claim 1 or 42.

46. (Original) A method of increasing the adenylyl cyclase activity or the level of 5'-monophosphate (cAMP) in a cell, cell culture or tissue expressing the follicle stimulating hormone receptor comprising contacting said cell, cell culture or tissue with a compound of claim 1.

47. (Original) A method of inducing ovulation in a female mammal comprising administering to said female mammal an ovulation-inducing amount of a compound of claim 1.

48. (Amended) A method of treating a fertility disorder in a patient comprising administering to said patient a therapeutically effective amount of a compound of claim 1 or 42.

49. (Original) A method of treating infertility in a female patient comprising administering to said female patient a therapeutically effective amount of a compound of claim 1.

50. (Cancelled) ~~A compound according to any one of claims 1 to 42 for use in therapy.~~

51. (Cancelled) ~~A compound according to any one of claims 1 to 42 for use in the treatment of a fertility disorder in a patient.~~

52. (Cancelled) ~~A compound according to any one of claims 1 to 42 for use in the treatment of infertility in a female patient.~~

53. (Cancelled) ~~A compound according to any one of claims 1 to 42 for use in the preparation of a medicament for use in therapy.~~

54. (Cancelled) ~~A compound according to any one of claims 1 to 42 for use in the preparation of a medicament for use in the treatment of a fertility disorder in a patient.~~

55. (Cancelled) ~~A compound according to any one of claims 1 to 42 for use in the preparation of a medicament for use in the treatment of infertility in a female patient.~~

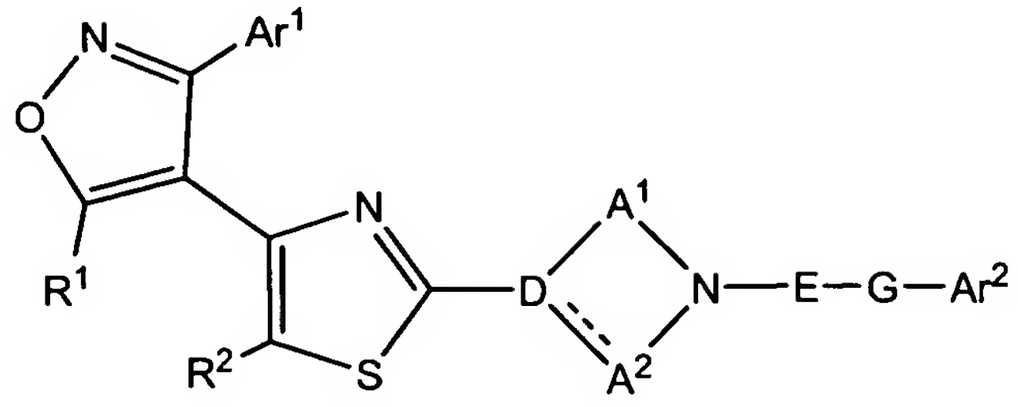
56. (Cancelled) ~~Use of a compound according to any one of claims 1 to 42 for the manufacture of a medicament.~~

57. (Cancelled) ~~Use of a compound according to any one of claims 1 to 42 for the manufacture of a medicament for the treatment of a fertility disorder in a patient.~~

58. (Cancelled) ~~Use of a compound according to any one of claims 1 to 42 for the manufacture of a medicament for the treatment of infertility in a female patient.~~

Clean Copy of Claims:

1. (Original) A compound of Formula I:



I

or a pharmaceutically acceptable salt, hydrate or solvate thereof, wherein:

Ar^1 is aryl, heteroaryl, biaryl, biheteroaryl, arylheteroaryl or heteroarylaryl, wherein Ar^1 is optionally substituted with one or more substituents selected from halo, cyano, nitro, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, carbocyclyl optionally substituted by one or more R^{13}, heterocyclyl optionally substituted by one or more R^{13}, carbocyclylalkyl optionally substituted by one or more R^{13}, carbocyclylalkenyl optionally substituted by one or more R^{13}, carbocyclylalkynyl optionally substituted by one or more R^{13}, heterocyclylalkyl optionally substituted by one or more R^{13}, heterocyclylalkenyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, hydroxylamino, OR^5, SR^5, SOR^6, SO_2R^6, COR^6, $COOR^5$, $OC(O)R^6$ or NR^7R^8;

Ar^2 is aryl or heteroaryl, each optionally substituted with one or more substituents selected from halo, cyano, nitro, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, carbocyclyl optionally substituted by one or more R^{14}, heterocyclyl optionally substituted by one or more R^{14}, hydroxylamino, OR^9, SR^9, SOR^{10}, SO_2R^{10}, COR^{10}, $COOR^9$, $OC(O)R^{10}$ or $NR^{11}R^{12}$;

D is N, C or CR^3;

- - - is a single bond when D is N or CR^3;

- - - is a double bond when D is C;

A^1 is absent or a C_{1-3} straight-chain aliphatic group optionally substituted with one or more substituents selected from halo, C_{1-4} alkyl, C_{1-4} haloalkyl, C_{1-4} alkoxy, C_{1-4} haloalkoxy, amino, (C_{1-6} alkyl)amino, di(C_{1-6} alkyl)amino, hydroxy, carboxy, (C_{1-4} alkoxy)carbonyl, or cyano;

A^2 is C_{1-4} straight-chain aliphatic group optionally substituted with one or more substituents selected from halo, C_{1-4} alkyl, C_{1-4} haloalkyl, C_{1-4} alkoxy, C_{1-4} haloalkoxy, amino, (C_{1-6} alkyl)amino, di(C_{1-6} alkyl)amino, hydroxy, carboxy, (C_{1-4} alkoxy)carbonyl, or cyano;

E is CO, C(O)O, $C(O)NR^4$, NR^4CONR^4, SO, SO_2, $SONR^4$, SO_2NR^4, or a bond;

G is C_{1-3} alkylene, C_{2-3} alkenylene or C_{2-3} alkynylene optionally substituted with one or more substituents selected from halo, C_{1-4} alkyl, C_{1-4} haloalkyl, C_{1-4} alkoxy, C_{1-4} haloalkoxy, amino, (C_{1-4} alkyl)amino, di(C_{1-4} alkyl)amino, hydroxy, carboxy, (C_{1-4} alkoxy)carbonyl, or cyano;

R^1 is H, C_{1-6} alkyl, C_{2-6} alkenyl or C_{2-6} alkynyl, wherein R^1 is optionally substituted with one or more substituents selected from halo, OH, SH, nitro, cyano, C_{1-4} haloalkyl, C_{1-5} acyl, C_{1-5} acyloxy, C_{1-4} alkoxy, C_{1-4} thioalkoxy, C_{1-4} haloalkoxy, amino, (C_{1-4} alkyl)amino, di(C_{1-4} alkyl)amino, aminocarbonyl, (C_{1-4} alkyl)aminocarbonyl, di(C_{1-4} alkyl)aminocarbonyl, C_{1-4} alkylsulfinyl, C_{1-4} alkylsulfonyl, C_{1-4} haloalkylsulfinyl, C_{1-4} haloalkylsulfonyl, aminosulfonyl, (C_{1-4} alkyl)aminosulfonyl, di(C_{1-4} alkyl)aminosulfonyl, ureido, C_{1-4} alkylureido, di(C_{1-4} alkyl)ureido, thioureido, C_{1-4} alkylthioureido, di(C_{1-4} alkyl)thioureido, carboxy, (C_{1-6} alkoxy)carbonyl, and hydroxylamino;

R^2 is H, C_{1-6} alkyl, C_{2-6} alkenyl or C_{2-6} alkynyl, wherein R^2 is optionally substituted with one or more substituents selected from halo, OH, SH, nitro, cyano, C_{1-4} haloalkyl, C_{1-5} acyl, C_{1-5} acyloxy, C_{1-4} alkoxy, C_{1-4} thioalkoxy, C_{1-4} haloalkoxy, amino, (C_{1-4} alkyl)amino, di(C_{1-4} alkyl)amino, aminocarbonyl, (C_{1-4} alkyl)aminocarbonyl, di(C_{1-4} alkyl)aminocarbonyl, C_{1-4} alkylsulfinyl, C_{1-4} alkylsulfonyl, C_{1-4} haloalkylsulfinyl, C_{1-4} haloalkylsulfonyl, aminosulfonyl, (C_{1-4} alkyl)aminosulfonyl, di(C_{1-4} alkyl)aminosulfonyl, ureido, C_{1-4} alkylureido, di(C_{1-4} alkyl)ureido, thioureido, C_{1-4} alkylthioureido, di(C_{1-4} alkyl)thioureido, carboxy, (C_{1-6} alkoxy)carbonyl, and hydroxylamino;

or R^1 and R^2 together with the carbon atoms to which they are attached and the two carbon atoms through which the isoxazole and thiazole moieties of the core are joined form a fused C_{5-7} carbocyclyl group or fused 5-7 membered heterocyclyl group optionally substituted with one or more substituents selected from halo, C_{1-4} alkyl, C_{1-4} haloalkyl, C_{1-4} alkoxy, C_{1-4} haloalkoxy, amino, (C_{1-4} alkyl)amino, di(C_{1-4} alkyl)amino, hydroxy, carboxy, (C_{1-4} alkoxy)carbonyl, or cyano;

R^3 is H or C_{1-6} alkyl;

R^4, at each independent occurrence, is H or C_{1-4} alkyl;

R^5 and R^9 are each, independently, H, C_{1-8} alkyl, C_{1-8} haloalkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, aryl, heteroaryl, C_{3-7} cycloalkyl, 5-7 membered heterocycloalkyl, arylalkyl, heteroarylalkyl, (C_{3-7} cycloalkyl)alkyl or (5-7 membered heterocycloalkyl)alkyl;

R^6 and R^{10} are each, independently, H, C_{1-8} alkyl, C_{1-8} haloalkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, aryl, heteroaryl, C_{3-7} cycloalkyl, 5-7 membered heterocycloalkyl, arylalkyl, heteroarylalkyl, (C_{3-7} cycloalkyl)alkyl, (5-7 membered heterocycloalkyl)alkyl, amino, (C_{1-4} alkyl)amino, di(C_{1-4} alkyl)amino,

R^7 and R^8 are each, independently, H, C_{1-8} alkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, aryl, heteroaryl, C_{3-7} cycloalkyl, 5-7 membered heterocycloalkyl, arylalkyl, heteroarylalkyl, (C_{3-7} cycloalkyl)alkyl, (5-7 membered heterocycloalkyl)alkyl, (C_{1-8} alkyl)carbonyl, (C_{1-8} haloalkyl)carbonyl, (C_{1-8} alkoxy)carbonyl, (C_{1-8} haloalkoxy)carbonyl, (C_{1-4} alkyl)sulfonyl, (C_{1-4} haloalkyl)sulfonyl or arylsulfonyl;

or R^7 and R^8, together with the N atom to which they are attached form a 5-7 membered heterocycloalkyl group;

R^{11} and R^{12} are each, independently, H, C_{1-8} alkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, aryl, heteroaryl, C_{3-7} cycloalkyl, 5-7 membered heterocycloalkyl, arylalkyl, heteroarylalkyl, (C_{3-7} cycloalkyl)alkyl, (5-7 membered heterocycloalkyl)alkyl, (C_{1-8} alkyl)carbonyl, (C_{1-8} haloalkyl)carbonyl, (C_{1-8} alkoxy)carbonyl, (C_{1-8} haloalkoxy)carbonyl, (C_{1-4} alkyl)sulfonyl, (C_{1-4} haloalkyl)sulfonyl or arylsulfonyl;

or R^{11} and R^{12}, together with the N atom to which they are attached form a 5-7 membered heterocycloalkyl group; and

R^{13} and R^{14} are each, independently, halo, cyano, nitro, C_{1-4} alkyl, C_{1-4} haloalkyl, C_{1-4} alkoxy, C_{1-4} haloalkoxy, amino, (C_{1-4} alkyl)amino, di(C_{1-4} alkyl)amino, hydroxy, carboxy, (C_{1-4} alkoxy)carbonyl, C_{1-4} acyl, C_{1-4} acyloxy, aminocarbonyl, (C_{1-4} alkyl)aminocarbonyl, or di(C_{1-4} alkyl)aminocarbonyl.

2. (Original) The compound of claim 1 wherein Ar^1 is aryl, heteroaryl, biaryl, biheteroaryl, arylheteroaryl or heteroarylaryl, wherein Ar^1 is substituted with 1, 2 or 3 substituents selected from halo, cyano, nitro, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, carbocyclyl optionally substituted by one or more R^{13}, heterocyclyl optionally substituted by one or more R^{13}, carbocyclylalkyl optionally substituted by one or more R^{13}, carbocyclylalkenyl optionally substituted by one or more R^{13}, carbocyclylalkynyl optionally substituted by one or more R^{13}, heterocyclylalkyl optionally substituted by one or more R^{13}, heterocyclylalkenyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, hydroxylamino, OR^5, SR^5, SOR^6, SO_2R^6, COR^6, $COOR^5$, $OC(O)R^6$ or NR^7R^8.

3. (Original) The compound of claim 1 wherein Ar^1 is aryl, heteroaryl, biaryl, biheteroaryl, arylheteroaryl or heteroarylaryl, wherein Ar^1 is optionally substituted with one or more substituents selected from halo, cyano, nitro, heterocyclyl optionally substituted by one or more R^{13}, heterocyclylalkyl optionally substituted by one or more R^{13}, heterocyclylalkenyl optionally

substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, hydroxylamino, OR^5, SR^5, SOR^6, SO_2R^6, COR^6, $COOR^5$, $OC(O)R^6$ or NR^7R^8.

4. (Original) The compound of claim 1 wherein Ar^1 is aryl, biaryl or heteroarylaryl, wherein Ar^1 is optionally substituted with one or more substituents selected from halo, cyano, nitro, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, carbocyclyl optionally substituted by one or more R^{13}, heterocyclyl optionally substituted by one or more R^{13}, carbocyclylalkyl optionally substituted by one or more R^{13}, carbocyclylalkenyl optionally substituted by one or more R^{13}, carbocyclylalkynyl optionally substituted by one or more R^{13}, heterocyclylalkyl optionally substituted by one or more R^{13}, heterocyclylalkenyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, hydroxylamino, OR^5, SR^5, SOR^6, SO_2R^6, COR^6, $COOR^5$, $OC(O)R^6$ or NR^7R^8.

5. (Original) The compound of claim 1 wherein Ar^1 is phenyl, biphenyl or heteroarylphenyl, wherein Ar^1 is optionally substituted with one or more substituents selected from halo, cyano, nitro, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, carbocyclyl optionally substituted by one or more R^{13}, heterocyclyl optionally substituted by one or more R^{13}, carbocyclylalkyl optionally substituted by one or more R^{13}, carbocyclylalkenyl optionally substituted by one or more R^{13}, carbocyclylalkynyl optionally substituted by one or more R^{13}, heterocyclylalkyl optionally substituted by one or more R^{13}, heterocyclylalkenyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, hydroxylamino, OR^5, SR^5, SOR^6, SO_2R^6, COR^6, $COOR^5$, $OC(O)R^6$ or NR^7R^8.

6. (Original) The compound of claim 1 wherein Ar^1 is phenyl, biphenyl or heteroarylphenyl, wherein Ar^1 is optionally substituted with 1, 2 or 3 substituents selected from halo, cyano, nitro, heterocyclyl optionally substituted by one or more R^{13}, heterocyclylalkyl optionally substituted by one or more R^{13}, heterocyclylalkenyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, hydroxylamino, OR^5, SR^5, SOR^6, SO_2R^6, COR^6, $COOR^5$, $OC(O)R^6$ or NR^7R^8.

7. (Original) The compound of claim 1 wherein Ar^1 is phenyl, biphenyl or heteroarylphenyl, wherein Ar^1 is substituted with 1, 2 or 3 substituents selected from halo, cyano, nitro, heterocyclyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, C_{1-4} alkoxy, SO_2R^6, COR^6, $COOR^5$ or NR^7R^8.

8. (Original) The compound of claim 1 wherein Ar^2 is aryl or heteroaryl, each optionally substituted with 1, 2 or 3 substituents selected from halo, cyano, nitro, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, carbocyclyl optionally substituted by one or more R^{14}, heterocyclyl optionally substituted by one or more R^{14}, hydroxylamino, OR^9, SR^9, SOR^{10}, SO_2R^{10}, COR^{10}, $COOR^9$, $OC(O)R^{10}$ or $NR^{11}R^{12}$.

9. (Original) The compound of claim 1 wherein Ar^2 is aryl or heteroaryl.

10. (Original) The compound of claim 1 wherein Ar^2 is heteroaryl.

11. (Original) The compound of claim 1 wherein Ar^2 is thienyl.

12. (Original) The compound of claim 1 wherein Ar^2 is aryl.

13. (Original) The compound of claim 1 wherein Ar^2 is phenyl.

14. (Original) The compound of claim 1 wherein D is CR^3.

15. (Original) The compound of claim 1 wherein D is CH.

16. (Original) The compound of claim 1 wherein A^1 is a C_{1-3} alkylene group.

17. (Original) The compound of claim 1 wherein A^1 is CH_2 or CH_2CH_2.

18. (Original) The compound of claim 1 wherein A^1 is absent.

19. (Original) The compound of claim 1 wherein D is CR^3 and A^2 is a C_{1-3} alkylene group.

20. (Original) The compound of claim 1 wherein D is CR^3 and A^2 is CH_2CH_2 or $CH_2CH_2CH_2$.

21. (Original) The compound of claim 1 wherein D is CR^3, A^1 is CH_2CH_2, and A^2 is CH_2CH_2.

22. (Original) The compound of claim 1 wherein D is CR^3, A^1 is absent, and A^2 is $CH_2CH_2CH_2$.

23. (Original) The compound of claim 1 wherein E is CO, C(O)O, $C(O)NR^4$, SO_2 or a bond.

24. (Original) The compound of claim 1 wherein E is CO or SO_2.

25. (Original) The compound of claim 1 wherein E is CO.

26. (Original) The compound of claim 1 wherein G is C_{1-3} alkylene.

27. (Original) The compound of claim 1 wherein G is CH_2 or CH_2CH_2.

28. (Original) The compound of claim 1 wherein G is CH_2.

29. (Original) The compound of claim 1 wherein R^1 is H or C_{1-4} alkyl.

30. (Original) The compound of claim 1 wherein R^1 is methyl.

31. (Original) The compound of claim 1 wherein:

R^1 is H, C_{1-6} alkyl, C_{2-6} alkenyl or C_{2-6} alkynyl, wherein R^1 is optionally substituted with one or more substituents selected from halo, OH, SH, nitro, cyano, C_{1-4} haloalkyl, C_{1-5} acyl, C_{1-5} acyloxy, C_{1-4} alkoxy, C_{1-4} thioalkoxy, C_{1-4} haloalkoxy, amino, (C_{1-4} alkyl)amino, di(C_{1-4} alkyl)amino, aminocarbonyl, (C_{1-4} alkyl)aminocarbonyl, di(C_{1-4} alkyl)aminocarbonyl, C_{1-4} alkylsulfinyl, C_{1-4} alkylsulfonyl, C_{1-4} haloalkylsulfinyl, C_{1-4} haloalkylsulfonyl, aminosulfonyl, (C_{1-4} alkyl)aminosulfonyl, di(C_{1-4} alkyl)aminosulfonyl, ureido, C_{1-4} alkylureido, di(C_{1-4} alkyl)ureido, thioureido, C_{1-4} alkylthioureido, di(C_{1-4} alkyl)thioureido, carboxy, (C_{1-6} alkoxy)carbonyl, and hydroxylamino; and

R^2 is H, C_{1-6} alkyl, C_{2-6} alkenyl or C_{2-6} alkynyl, wherein R^2 is optionally substituted with one or more substituents selected from halo, OH, SH, nitro, cyano, C_{1-4} haloalkyl, C_{1-5} acyl, C_{1-5} acyloxy, C_{1-4} alkoxy, C_{1-4} thioalkoxy, C_{1-4} haloalkoxy, amino, (C_{1-4} alkyl)amino, di(C_{1-4} alkyl)amino, aminocarbonyl, (C_{1-4} alkyl)aminocarbonyl, di(C_{1-4} alkyl)aminocarbonyl, C_{1-4} alkylsulfinyl, C_{1-4} alkylsulfonyl, C_{1-4} haloalkylsulfinyl, C_{1-4} haloalkylsulfonyl, aminosulfonyl, (C_{1-4} alkyl)aminosulfonyl, di(C_{1-4} alkyl)aminosulfonyl, ureido, C_{1-4} alkylureido, di(C_{1-4} alkyl)ureido, thioureido, C_{1-4} alkylthioureido, di(C_{1-4} alkyl)thioureido, carboxy, (C_{1-6} alkoxy)carbonyl, and hydroxylamino.

32. (Original) The compound of claim 1 wherein R^2 is H or C_{1-4} alkyl.

33. (Original) The compound of claim 1 wherein R^2 is H.

34. (Original) The compound of claim 1 wherein R^3 is H.

35. (Original) The compound of claim 1 wherein R^4, at each independent occurrence, is H.

36. (Original) The compound of claim 1 wherein:

D is CR^3;

A^1 is a absent or a C_{1-3} alkylene group;

A^2 is a C_{1-3} alkylene group;

E is CO, C(O)O, $C(O)NR^4$, SO_2 or a bond;

G is C_{1-3} alkylene;

R^1 is H or C_{1-6} alkyl; and

R^2 is H or C_{1-6} alkyl.

37. (Original) The compound of claim 1 wherein:

Ar^2 is aryl or heteroaryl, each optionally substituted with 1, 2 or 3 substituents selected from halo, cyano, nitro, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, carbocyclyl optionally substituted by one or more R^{14}, heterocyclyl optionally substituted by one or more R^{14}, hydroxylamino, OR^9, SR^9, SOR^{10}, SO_2R^{10}, COR^{10}, $COOR^9$, $OC(O)R^{10}$ or $NR^{11}R^{12}$;

D is CR^3;

A^1 is absent or a C_{1-3} alkylene group;

A^2 is a C_{1-3} alkylene group;

E is CO, C(O)O, $C(O)NR^4$, SO_2 or a bond;

G is C_{1-3} alkylene;

R^1 is H or C_{1-6} alkyl; and

R^2 is H or C_{1-6} alkyl.

38. (Original) The compound of claim 1 wherein:

Ar^1 is phenyl, biphenyl or heteroarylphenyl, wherein Ar^1 is optionally substituted with one or more substituents selected from halo, cyano, nitro, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-

C_6 alkynyl, carbocyclyl optionally substituted by one or more R^{13}, heterocyclyl optionally substituted by one or more R^{13}, carbocyclylalkyl optionally substituted by one or more R^{13}, carbocyclylalkenyl optionally substituted by one or more R^{13}, carbocyclylalkynyl optionally substituted by one or more R^{13}, heterocyclylalkyl optionally substituted by one or more R^{13}, heterocyclylalkenyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, hydroxylamino, OR^5, SR^5, SOR^6, SO_2R^6, COR^6, $COOR^5$, $OC(O)R^6$ or NR^7R^8;

Ar^2 is aryl or heteroaryl;

D is CR^3;

A^1 is absent or a C_{1-3} alkylene group;

A^2 is a C_{1-3} alkylene group;

E is CO, C(O)O, $C(O)NR^4$, SO_2 or a bond;

G is C_{1-3} alkylene;

R^1 is H or C_{1-6} alkyl; and

R^2 is H or C_{1-6} alkyl.

39. (Original) The compound of claim 1 wherein:

Ar^1 is phenyl, biphenyl or heteroarylphenyl, wherein Ar^1 is optionally substituted with 1, 2 or 3 substituents selected from halo, cyano, nitro, heterocyclyl optionally substituted by one or more R^{13}, heterocyclylalkyl optionally substituted by one or more R^{13}, heterocyclylalkenyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, hydroxylamino, OR^5, SR^5, SOR^6, SO_2R^6, COR^6, $COOR^5$, $OC(O)R^6$ or NR^7R^8;

Ar^2 is aryl or heteroaryl;

D is CR^3;

A^1 is absent or a C_{1-3} alkylene group;

A^2 is a C_{1-3} alkylene group;

E is CO, C(O)O, $C(O)NR^4$, SO_2 or a bond;

G is C_{1-3} alkylene;

R^1 is H or C_{1-6} alkyl; and

R^2 is H or C_{1-6} alkyl.

40. (Original) The compound of claim 1 wherein:

Ar^1 is phenyl, biphenyl or heteroarylphenyl, wherein Ar^1 is optionally substituted with 1, 2 or 3 substituents selected from halo, cyano, nitro, heterocyclyl optionally substituted by one or more R^{13}, heterocyclylalkyl optionally substituted by one or more R^{13}, heterocyclylalkenyl optionally

substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, hydroxylamino, OR^5, SR^5, SOR^6, SO_2R^6, COR^6, $COOR^5$, $OC(O)R^6$ or NR^7R^8;

Ar^2 is aryl or heteroaryl;

D is CH;

A^1 is absent, CH_2 or CH_2CH_2;

A^2 is CH_2CH_2 or $CH_2CH_2CH_2$;

E is CO, SO_2 or a bond;

G is CH_2 or CH_2CH_2;

R^1 is C_{1-4} alkyl; and

R^2 is H.

41. (Original) The compound of claim 1 wherein:

Ar^1 is phenyl, biphenyl or heteroarylphenyl, wherein Ar^1 is substituted with 1, 2 or 3 substituents selected from halo, cyano, nitro, heterocyclyl optionally substituted by one or more R^{13}, heterocyclylalkynyl optionally substituted by one or more R^{13}, C_{1-4} alkoxy, SO_2R^6, COR^6, $COOR^5$ or NR^7R^8;

Ar^2 is aryl or heteroaryl;

D is CH;

A^1 is absent, CH_2 or CH_2CH_2;

A^2 is CH_2CH_2 or $CH_2CH_2CH_2$;

E is CO, SO_2 or a bond;

G is CH_2 or CH_2CH_2;

R^1 is C_{1-4} alkyl; and

R^2 is H.

42. (Original) The compound of claim 1 selected from:

4-{4-[3-(3-Bromo-phenyl)-5-methyl-isoxazol-4-yl]-thiazol-2-yl}-1-phenylmethane-sulfonyl-piperidine;

1-(4-{4-[3-(3-Bromo-phenyl)-5-methyl-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-2-yl-ethanone;

1-(4-{4-[3-(3-Bromo-phenyl)-5-methyl-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-3-yl-ethanone;

1-(2-{4-[3-(3-Bromo-phenyl)-5-methyl-isoxazol-4-yl]-thiazol-2-yl}-pyrrolidin-1-yl)-2-thiophen-2-yl-ethanone;

1-(4-{4-[3-(3-Isopropylamino-phenyl)-5-methyl-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-2-yl-ethanone;

1-[4-(4-{5-Methyl-3-[3-(2-morpholin-4-yl-ethylamino)-phenyl]-isoxazol-4-yl}-thiazol-2-yl)-piperidin-1-yl]-2-thiophen-2-yl-ethanone;

1-(4-{4-[5-Methyl-3-(3-morpholin-4-yl-phenyl)-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-2-yl-ethanone;

1-[4-(4-{5-Methyl-3-[3-(4-methyl-piperazin-1-yl)-phenyl]-isoxazol-4-yl}-thiazol-2-yl)-piperidin-1-yl]-2-thiophen-2-yl-ethanone;

N-[3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-4-yl]-acetamide;

N-[3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-3-yl]-acetamide;

3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-4-carboxylic acid amide;

3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-3-carboxylic acid amide;

3'-{5-Methyl-4-[2-(1-phenylmethanesulfonyl-piperidin-4-yl)-thiazol-4-yl]-isoxazol-3-yl}-biphenyl-4-carboxylic acid;

3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-4-carboxylic acid;

3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-pyrrolidin-2-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-4-carboxylic acid;

3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-3-carboxylic acid;

1-(4-{4-[5-Methyl-3-(3-pyridin-4-yl-phenyl)-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-2-yl-ethanone;

1-(4-{4-[5-Methyl-3-(3-pyrimidin-5-yl-phenyl)-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-2-yl-ethanone;

1-(4-{4-[3-(4'-Methoxy-biphenyl-3-yl)-5-methyl-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-2-yl-ethanone;

3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-4-carboxylic acid dimethylamide;

3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-4-carboxylic acid methylamide;

1-[4-(4-{5-Methyl-3-[4'-(morpholine-4-carbonyl)-biphenyl-3-yl]-isoxazol-4-yl}-thiazol-2-yl)-piperidin-1-yl]-2-thiophen-2-yl-ethanone;

1-[4-(4-{5-Methyl-3-[3'-(morpholine-4-carbonyl)-biphenyl-3-yl]-isoxazol-4-yl}-thiazol-2-yl)-piperidin-1-yl]-2-thiophen-2-yl-ethanone;

1-(4-{4-[3-(4'-Amino-biphenyl-3-yl)-5-methyl-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-2-yl-ethanone;

N-[3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-4-yl]-methanesulfonamide;

1-(4-{4-[3-(4'-Methanesulfonyl-biphenyl-3-yl)-5-methyl-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-2-yl-ethanone;

2,2,2-Trifluoro-N-[3'-(5-methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-3-yl]-acetamide;

1-(4-{4-[3-(3'-Methanesulfonyl-biphenyl-3-yl)-5-methyl-isoxazol-4-yl]-thiazol-2-yl}-piperidin-1-yl)-2-thiophen-2-yl-ethanone;

3'-(5-Methyl-4-{2-[1-(2-thiophen-2-yl-acetyl)-piperidin-4-yl]-thiazol-4-yl}-isoxazol-3-yl)-biphenyl-4-carbonitrile;

1-{4-[4-(3-{3-[3-(1,1-Dioxo-1λ6-thiomorpholin-4-yl)-prop-1-ynyl]-phenyl}-5-methyl-isoxazol-4-yl)-thiazol-2-yl]-piperidin-1-yl}-2-thiophen-2-yl-ethanone;

1-[4-(4-{5-Methyl-3-[4'-(1H-tetrazol-5-yl)-biphenyl-3-yl]-isoxazol-4-yl}-thiazol-2-yl)-piperidin-1-yl]-2-thiophen-2-yl-ethanone; and

1-[4-(4-{3-[4'-(4,5-Dihydro-1H-imidazol-2-yl)-biphenyl-3-yl]-5-methyl-isoxazol-4-yl}-thiazol-2-yl)-piperidin-1-yl]-2-thiophen-2-yl-ethanone;

or pharmaceutically acceptable salt thereof.

43. (Original) A composition comprising a compound of claim 1 and a pharmaceutically acceptable carrier.

44. (Original) A method of modulating the follicle stimulating hormone (FSH) receptor comprising contacting said receptor with a compound of claim 1.

45. (Amended) A method of activating the follicle stimulating hormone (FSH) receptor comprising contacting said receptor with a compound of claim 1 or 42.

46. (Original) A method of increasing the adenylyl cyclase activity or the level of 5'-monophosphate (cAMP) in a cell, cell culture or tissue expressing the follicle stimulating hormone receptor comprising contacting said cell, cell culture or tissue with a compound of claim 1.

47. (Original) A method of inducing ovulation in a female mammal comprising administering to said female mammal an ovulation-inducing amount of a compound of claim 1.

48. (Amended) A method of treating a fertility disorder in a patient comprising administering to said patient a therapeutically effective amount of a compound of claim 1 or 42.

49. (Original) A method of treating infertility in a female patient comprising administering to said female patient a therapeutically effective amount of a compound of claim 1.